

Remarks

Applicant respectfully requests reconsideration of the above-identified patent application in view of the amendments and the remarks. Claims 17-26 have been withdrawn from consideration. Claims 41-69 are pending in this application upon entry of this Amendment. Applicant has added Claims 41-69 and cancelled Claims 1-16 and 27-40.

The specification was objected to because “the first sentence of the specification needs to be updated to include the updated status of the parent application.” Applicant has amended the specification to indicate that U.S. application having Serial No. 10/684,877 has issued as U.S. Patent No. 6,983,831. Therefore, Applicant respectfully requests withdrawal of the objection to the specification.

Claims 1-6 and 32 were objected to because of an informality in Claim 1. Claims 6-16 and 27-35 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Remaining claims that depended from one of Claims 7, 13, 27, and 31 were rejected as being indefinite as depending from an indefinite claim. Applicant has cancelled Claims 1-16 and 27-40. Therefore, Applicant respectfully requests withdrawal of the objections and rejections to Claims 1-16 and 27-40.

Claims 7, 10-13, and 16 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 1,772,639 issued to Slade. Slade generally describes a brake shoe 9, a lining 1, a backing 2, and stitches 8. The stitches 8 in Slade are forced through openings 7 in the backing 2 and through the lining 1 to secure the lining 1 on the backing 2. The lining 1 and the backing 2 are then pressed to clinch the stitches 8 in the lining 1. Slade generally describes rivets 11 that “merely serve to maintain the ends of the backing in place upon the shoe” (page 2, lines 37-39). “[F]orce which is applied to the brake lining will not be applied to the upset ends 13 of the rivets, but will, in fact, be assumed entirely by the engagement of the bent ends of the backing with the edges of the shoe [10]” (page 2, lines 32-36).

Contrary to the lining of Slade where stitches are used to secure the lining to the backing, the frictional brake lining as recited in Claims 41, 61, 63-66, and 69 is molded to the backing plate to form a continuous molded layer. Slade does not describe a continuous molded layer. Instead, the lining of Slade has stitches that are forced through and clinched in the lining. The lining of Slade is not continuous because the stitches interrupt the lining with a number of holes that extend through the lining. Unlike Slade, the frictional brake lining as recited in Claims 41, 61, 63-66, and 69 is free of holes extending/passing ***completely through*** the brake lining.

Claims 41, 61, 63-64, 66, and 69 recite a key and a preassembled fastener in a brake plate. The key mates with a slot in a brake shoe to transfer shear force from the brake plate to the brake shoe. The preassembled fastener extends away from the brake lining and toward the brake shoe to facilitate alignment of the key with a slot/bore. The frictional brake lining is molded to cover at least a portion of the preassembled fastener. Slade does not describe a brake plate having a key that resists shear force applied to the brake shoe 9. Slade relies on the bent ends of the backing to receive force applied to the brake lining. Slade does not describe a preassembled fastener that extends toward the brake shoe, is covered by the lining, and facilitates alignment of a key with a slot/bore.

Claims 1-2, 6, 30, and 32 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 2,879,866 issued to Newell. Claims 31 and 35 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Newell. Claims 27 and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Newell in view of Slade. Newell generally describes a brake shoe assemblage that includes a reuseable backing plate 23, a rivet plate 1, and a brake lining 21. The rivet plate 1 includes a plurality of protuberances 2 each of which has an opening 9 that extends through the rivet plate 1. A rivet 17 is inserted through the opening 9 and through a bore 26 in the backing plate 23. Then the shank 16 of the rivet 17 is peened over the backing plate 23 to secure the rivet plate 1 to the backing plate 23.

Unlike Newell, the brake shoe assembly as recited in Claims 41, 61, 63-64 includes at least one key, at least one preassembled fastener, and a plurality of individual fasteners. The key is formed from the backing plate and is not completely separated from the

plate. Newell does not describe a brake shoe assemblage that includes each of these three elements. Newell describes the rivet 17 for securing the rivet plate 1 to the backing plate 23. Unlike Newell where the rivet 17 is a part separate from the rivet plate 1, the key is formed from the backing plate.

Claim 41 generally corresponds to cancelled Claim 1, but with the slot in the brake shoe and the key in the brake plate. Examiner rejected Claim 1 as being anticipated by Newell. Claim 41 recites a key protruding radially inward relative to the brake shoe without the key passing completely through the brake shoe. Unlike Newell where the rivet 17 is inserted through the opening 9 in the rivet plate 1, the key as recited in Claim 41 does not pass completely through the brake shoe. Newell does not describe a key that protrudes radially inward.

Claim 61 recites the plate holes in the backing plate spaced from the frictional brake lining. Claim 61 generally corresponds to cancelled Claim 7. Unlike the opening 9 in the rivet plate 1 of Newell, the plate holes as recited in Claim 61 are (i) spaced from the frictional brake lining and (ii) not covered with the frictional brake lining.

Claim 63 recites a plurality of apertures. The frictional brake lining is molded into each of the apertures in the backing plate to mechanically attach the frictional brake lining to the backing plate.

Claim 64 recites the plurality of apertures as in Claim 63, a frictional brake lining between each of four corners, a key that protrudes “radially inward relative to the brake shoe” without the key passing completely through the brake shoe, and a slot that does not pass completely through the brake shoe. The four corners define the plate holes and an area between each of the four corners. The frictional brake lining is molded to the area between *each* of the four corners. Unlike Slade where brake lining 1 is attached to the backing 2 between two end portions 4 of the backing 2, the frictional brake lining as recited in Claim 62 is molded between each plate hole in the four corners. This exposes the plate holes in the backing for the individual fasteners while providing frictional brake lining between the four corners of the backing plate.

Claim 65 generally corresponds to cancelled Claim 30 and Figures 7-11 of Applicant's drawings. Examiner rejected Claim 30 as being anticipated by Newell. Claim 65 recites tangs that are partially *severed from* the backing plate. The tangs mate with respective receptacles in the brake shoe for resisting radial movement of the brake plate relative to the outer radial surface of the brake shoe. Unlike Newell where rivet 17 is inserted through the opening 9 in the rivet plate 1, the tangs as recited in Claim 65 do not pass *completely through* the brake shoe. Newell does not describe tangs as severed from the rivet plate 1. Instead, Newell uses a rivet 17, which is a part separate from the rivet plate 1, for securement. In contrast, the brake shoe assembly as recited in Claim 65 has both tangs and a plurality of preassembled fasteners to resist movement of the brake plate relative to the brake shoe. Claim 65 recites a plurality of preassembled fasteners that extend away from the brake lining and toward the brake shoe to facilitate alignment of the tangs with the receptacles. Slade does not describe preassembled fasteners that facilitate alignment of tangs with receptacles. Also contrary to Slade, the frictional brake lining as recited in Claim 65 is molded to cover the preassembled fasteners.

Applicant has added Claims 66 and 69. Claims 66 and 69 generally correspond to cancelled Claims 36-37 and 39 as well as Figures 13 and 15 of Applicant's drawings. Examiner rejected Claims 36-37 and 39 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,453,621 issued to Warwick in view of Newell. Warwick generally describes a brake shoe 12 including holes 34 and lining material 36. The lining material 36 extends through the holes 34 to attach the lining material 36 to the brake shoe 12 "so that *no* rivets or adhesive bonding is required" (emphasis added) (see Column 2, lines 25-30). In the Examiner's rejection of Claim 36, the Examiner relied on Warwick and Newell. However, one of ordinary skill in the art at the time of the invention was made would not have reasonably combined Warwick and Newell without eliminating Warwick's idea of attaching the lining material 36 to the brake shoe 12 "so that *no* rivets or adhesive bonding is required."

Claims 66 and 69 recite a brake block that has a generally flat backing plate and an arcuate frictional brake lining. Claims 66 and 69 recite not only at least one key, but also a plurality of preassembled fasteners that facilitate alignment of key in the backing plate relative to the brake shoe. The combination of Warwick and Newell fails to describe a brake shoe

assemblage that includes these two elements. In direct contrast to the brake shoe of Warwick where lining material 36 extends through the hole 34 in the brake shoe 12, the brake lining as recited in Claims 66 and 69 is molded to the flat backing plate –not the brake shoe as in Warwick. Unlike Warwick, which does not describe a backing plate, the backing plate as recited in Claims 66 and 69 includes a key that is at least partially formed from the backing plate to mate with the key way in the brake shoe. Unlike the brake shoe assembly of Newell where the rivet 17 is a part separate from the rivet plate 1, the key as recited in Claims 66 and 69 is formed from the backing plate. The rivet of Newell is peened over the backing plate. However, the key as recited in Claims 66 and 69 is not structurally modified after the brake block is secured to the brake shoe.

Claims 3 and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Newell in view of U.S. Patent No. 3,996,717 issued to Sallenave. Examiner stated Sallenave teaches threaded clinch stud bolts. However, the stud bolts of Sallenave are not described as being “threaded clinch stud bolts.” Sallenave deals with building wall surfaces as applied to buildings and erected structures. Sallenave does not deal with brakes shoes, brakes, or anything related to braking systems. Thus, one of ordinary skill in the art at the time of the invention was made would not have reasonably looked to Sallenave.

Claims 4 and 34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Newell in view of U.S. Patent No. 6,300,847 issued to Gallagher. Examiner stated Gallagher teaches use of at least one key 260 and at least one fastener 261 that is longer than the key. Gallagher relates to data servers that move data between a network and a data storage system. However, Gallagher does not deal with brakes shoes, brakes, or anything related to braking systems. Thus, one of ordinary skill in the art at the time of the invention was made would not have reasonably looked to Gallagher.

Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Newell in view of U.S. Patent No. 6,125,567 issued to Roy. Examiner stated Roy teaches use of a fastener being secured to an element by a flaring tool. However, Roy does not deal with brakes shoes, brakes, or anything related to braking systems. Instead, Roy relates to self-fastening turn

buttons for picture frames. Thus, one of ordinary skill in the art at the time of the invention was made would not have reasonably looked to Roy. Roy deals with picture frames –not brake shoe assemblies.

Claims 8 and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Slade in view of U.S. Patent No. 2,053,939 issued to Barrows. Claims 9 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Slade in view of Barrows and Newell. Claim 28 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Newell in view of Slade and Barrows. Examiner stated Barrows teaches a slot 12 being axially elongated to receive a corresponding elongated key 13. However, Barrows deals with draft rigging for railway vehicles. Thus, one of ordinary skill in the art at the time of the invention was made would not have reasonably looked to Barrows.

Claims 42-47, 50, and 52-60 depend from Claim 41, Claims 48-49 depend from Claim 47, Claim 51 depends from Claim 50, Claim 62 depends from Claim 61, and Claims 67-68 depend from Claim 66. Each of these dependent claims include the limitations of the claim that it depends from. Claims 1-16 and 27-40 have been cancelled. Therefore, Applicant respectfully requests withdrawal of the rejections to Claims 1-16 and 27-40 and submits that Claims 41-69 are patentable in view of Slade, Newell, Barrows, Sallenave, Roy, Gallagher, Shim, Warwick, Roth or any possible combination thereof.

Applicant acknowledges Examiner Burch's helpful comments and participation in a telephonic interview conducted on May 18, 2009, pursuant to 37 C.F.R. § 1.133. During the interview, Applicant presented a set of draft claims for discussion purposes only. Examiner Burch and Applicant discussed the set of draft claims and Applicant stated reasons that the draft claims are not anticipated or rendered obvious by the prior art cited in the Office Action. The arguments advanced in favor of patentability are presented in these remarks.

Applicant requests that the Examiner telephone his attorney if it would advance the prosecution of this application. Applicant believes that all formal and substantive requirements for patentability have been met and that this case is in condition for allowance.

Please charge any fees or credit any overpayments as a result of the filing of this paper to Deposit Account No. 02-3978. The Examiner is respectfully requested to pass this case to issue.

Respectfully submitted,

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